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IPW

February 28, 2005

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

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**Art Unit 1653**

Re: U.S. Utility Patent Application  
Application No. 10/721,793; Filed: November 26, 2003  
For: **Recombinant Immunogens for the Generation of Antivenoms to the  
Venom of Scorpions of the Genus Centruroides**  
Inventors: CORONA VILLEGAS *et al.*  
Our Ref: 2099.0070001/LBB/LAV

Sir:

Transmitted herewith for appropriate action are the following documents:

1. Information Disclosure Statement Under 37 C.F.R. § 1.97(b) (3 pp.);
2. Form PTO-1449 listing 18 cited documents (6 pp);
3. Copies of references AR1, AS1, AT1, AR2, AS2, AT2, AR3, AS3, AT3, AR4, AS4, AT4, AR5, AS5, AT5, AR6, AS6, and AT6 (18 documents); and
4. Return postcard.

It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier. In the event that extensions of time are necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned.

Commissioner for Patents  
February 28, 2005  
Page 2

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

A handwritten signature in cursive script, reading "Lawrence B. Bugaisky".

Lawrence B. Bugaisky  
Attorney for Applicants  
Registration No. 35,086

LBB/LAV/rjv  
Enclosures

368607\_1.DOC



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Corona Villegas *et al.*

Appl. No.: 10/721,793

Filed: November 26, 2003

For: **Recombinant Immunogens for the  
Generation of Antivenoms to the  
Venom of Scorpions of the Genus  
Centruroides**

Confirmation No.: 6600

Art Unit: 1653

Examiner: Desai, A.U.

Atty. Docket: 2099.0070001/JAG/LBB

**Information Disclosure Statement  
Under 37 C.F.R. § 1.97(b)**

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Sir:

Listed on accompanying Form PTO-1449 are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§1.56, 1.97 and 1.98. Copies of documents **AR1-AT6** are submitted. However, in accordance with 37 C.F.R. § 1.98(a)(2), no copies of U.S. patents and patent application publications cited on the attached Form PTO-1449 are submitted.

In accordance with 37 C.F.R. § 1.98(a)(3), Applicants' undersigned representative submits the following concise explanation of the relevance of the non-English language document, Document **AT3**, cited on Form PTO-1449:

Document **AT3**, Maraboto Martinez, J.A., et al., 3a Reunión de Expertos en Envenenamiento por Animales Ponzosñosos, Instituto de Biotecnología, (1999), is in the Spanish language. A copy of an English language translation of Document **AT3** is

provided and is cited on Form PTO-1449 as Document **AT6**. Document **AT3** is an epidemiological overview of reported intoxications due to poisonous animals in Mexico between the years 1996 and 1998, and was published by the Mexican Institute of Social Security, Direction of Medical Services.

Where the publication date of a listed document does not provide a month of publication, the year of publication of the listed document is sufficiently earlier than the effective U.S. filing date and any foreign priority date so that the month of publication is not in issue. Applicants have listed publication dates on the attached PTO-1449 based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith.

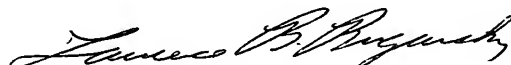
This Information Disclosure Statement is being filed before the mailing of a first Office Action on the merits in accordance with 37 C.F.R. § 1.97(b)(3). No statement or fee is required.

It is respectfully requested that the Examiner initial and return a copy of the enclosed PTO-1449, and to indicate in the official file wrapper of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

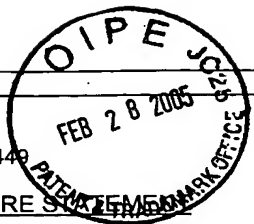
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Attorney Agent for Applicants  
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Date: February 28, 2005

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FORM PTO-1449

INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
2099.0070001/JAG/LBBAPPLICATION NO.  
10/721,793FIRST NAMED INVENTOR  
Corona Villegas *et al.*FILING DATE  
November 26, 2003ART UNIT  
1653

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA1	5,904,922	05/18/1999	Carroll			05/16/1995
	AB1	5,443,976	08/22/1995	Carroll			07/14/1994
	AC						
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## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL						Yes No
	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	1	Becerril, B., <i>et al.</i> , "Cloning and characterization of cDNAs that code for Na <sup>+</sup> -channel-blocking toxins of the scorpion <i>Centruroides noxius</i> Hoffman," <i>Gene</i> 128:165-171, Elsevier Science Publishers B.V. (1993)
	AS	1	Couraud, F., <i>et al.</i> , "Two types of scorpion toxin receptor sites, one Related to the Activation, the Other to the inactivation of the action potential sodium channel," <i>Toxicon</i> 20:9-16, Pergamon Press, Ltd. (1982)
	AT	1	Dehesa-Dávila, M. and Possani, L.D., "Scorpionism and serotherapy in Mexico," <i>Toxicon</i> 32:1015-1018, Elsevier Science, Ltd. (1994)

EXAMINER

DATE CONSIDERED

**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449  <b>INFORMATION DISCLOSURE STATEMENT</b>	ATTY. DOCKET NO. 2099.0070001/JAG/LBB	APPLICATION NO. 10/721,793
	FIRST NAMED INVENTOR Corona Villegas <i>et al.</i>	
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	AL						Yes No
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	AN						Yes No
	AO						Yes No
	AP						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	2	Dehesa-Davila, M., <i>et al.</i> , "Clinical toxicology of scorpion stings," in <i>Handbook of Clinical Toxicology of Animal Venoms and Poisons</i> , Ch. 18, Meier, J., and White, J., eds., CRC Press, Boca Raton, LA, pp. 221-238 (1995)
	AS	2	Edman, P. and Begg, G., "A protein sequenator," <i>Eur. J. Biochem.</i> 1:80-91, Blackwell Science, Ltd. on behalf of the Federation of European Biochemical Societies (1967)
	AT	2	García, C., <i>et al.</i> , "Isolation, characterization and comparison of novel crustacean toxin with a mammalian toxin from the venom of the Scorpion <i>Centruroides noxius</i> Hoffman," <i>Comp. Biochem. Physiol.</i> 116B:315-322, Elsevier Science, Inc. (1997)

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	AN						Yes No
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**OTHER (Including Author, Title, Date, Pertinent Pages, etc.)**

	AR	<u>3</u>	Legros, C., <i>et al.</i> , "Use of fusion protein constructs to generate potent immunotherapy and protection against scorpion toxins," <i>Vaccine</i> 20:934-942, Elsevier Science, Ltd. (Dec. 2001)
	AS	<u>3</u>	Licea, A.F., <i>et al.</i> , "FAB fragments of the monoclonal antibody BCF2 are capable of neutralizing the whole soluble venom from the Scorpion <i>Centruroides noxius</i> Hoffman," <i>Toxicon</i> 34:843-847, Elsevier Science, Ltd. (1996)
	AT	<u>3</u>	Maraboto Martinez, J.A., <i>et al.</i> , "Panorama Epidemiológico de las Intoxicaciones Causadas por Animales Ponzoñosos en la Población Derechohabiente del IMSS 1990-1998," in <i>3ª Reunión de Expertos en Envenenamiento por Animales Ponzoñosos</i> , Instituto de Biotecnología, Universidad Nacional Autónoma de México, Alcapulco, Gro., México pp. 1-14 (1999)

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	AN						Yes No
	AO						Yes No
	AP						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

AR	4	Nonner, W., "Effects of <i>Leiurus</i> scorpion venom on the "gating" current in myelinated nerve," <i>Adv. Cytopharmacol.</i> 3:345-352. Raven Press (1979)
AS	4	Possani, L.D., <i>et al.</i> , "Scorpion toxins from <i>Centruroides noxius</i> and <i>Tityus serrulatus</i> ," <i>Biochem. J.</i> 229:739-750, Biochemical Society/Portland Press (1985)
AT	4	Possani, L.D., <i>et al.</i> , "Scorpion toxins specific for $Na^+$ channels," <i>Eur. J. Biochem.</i> 264:287-300, Blackwell Science, Ltd. on behalf of the Federation of European Biochemical Societies (1999)

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	AP						Yes No

**OTHER (Including Author, Title, Date, Pertinent Pages, etc.)**

	AR	<u>5</u>	Possani, L.D., <i>et al.</i> , "Peptides and genes coding for scorpion toxins that affect ion-channels," <i>Biochimie</i> 82:861-868, Editions Scientifiques Elsevier (2000)
	AS	<u>5</u>	Soraida Calderon-Aranda, E., <i>et al.</i> , "Neutralizing capacity of murine sera Induced by different antigens of scorpion venom," <i>Toxicon</i> 31:327-337, Pergamon Press, Ltd. (1993)
	AT	<u>5</u>	Soraida Calderon-Aranda, E., <i>et al.</i> , "The use of synthetic peptides can be a misleading approach to generate vaccines against scorpion toxins," <i>Vaccine</i> 13:1198-1206, Elsevier Science, Ltd. (1995)

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	AO						Yes No
	AP						Yes No

**OTHER (Including Author, Title, Date, Pertinent Pages, etc.)**

	AR	<u>6</u>	Strichartz, G., <i>et al.</i> , "An integrated view of the molecular toxinology of sodium channel gating in excitable cells," <i>Ann. Rev. Neurosci.</i> 10:237-267, Annual Reviews, Inc. (1987)
	AS	<u>6</u>	Zamudio, F., <i>et al.</i> , "Amino acid sequence and immunological characterization with monoclonal antibodies of two toxins from the venom of the Scorpion <i>Centruroides noxius</i> Hoffman," <i>Eur. J. Biochem.</i> 204:281-292, Blackwell Science, Ltd. on behalf of the Federation of European Biochemical Societies (1992)
	AT	<u>6</u>	English translation of Maraboto Martinez, J.A., <i>et al.</i> , "Intoxications caused by poisonous animals among IMSS right-holders, 1990-1998. An epidemiological overview," in <i>3ª Reunión de Expertos en Envenenamiento por Animales Ponzosñosos</i> , Instituto de Biotecnología, Universidad Nacional Autónoma de México, Alcapulco, Gro., México pp. 1-14 (1999), translated by Amador Rodriguez, J.C. (December 2004), Document AT3

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